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(54) Method for making necklaces,

bracelets and the like by chains

wound upon a supporting core

(57) Jewellery articles eg. necklaces, bracelets, earrings, and rings are made by winding a chain 2 around an elongated element 1 having an inner core made of precious metal, at least one such covering chain (2a, 2b, 2c, 2d, 2e) (Fig. 3 not shown) made of precious metal being spirally wound around the aforesaid core 1. The turns of the chain 2 are kept close together, and secured to the supporting element 1, preventing its unwinding.

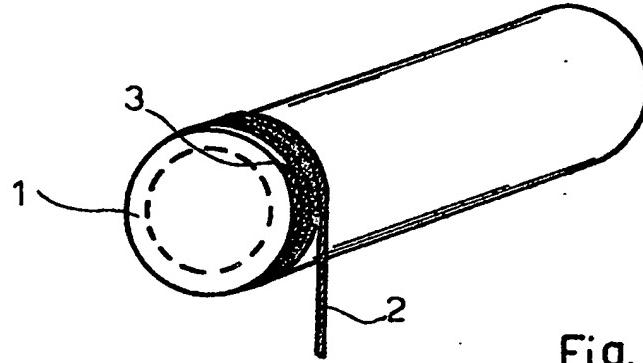


Fig. 1

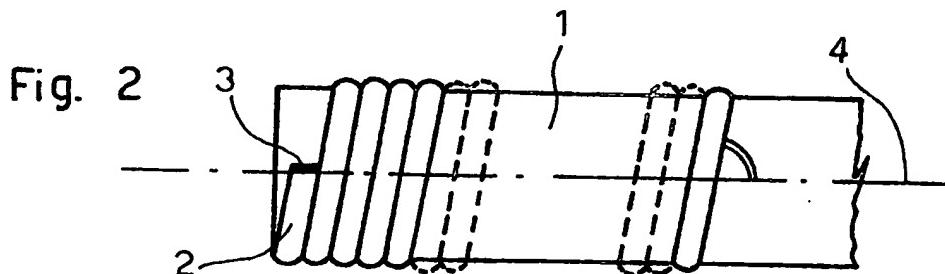


Fig. 2

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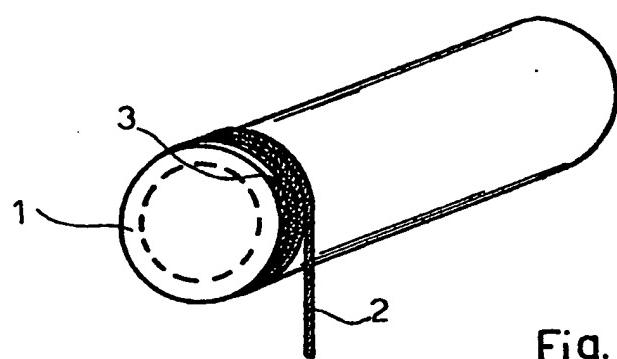


Fig. 1

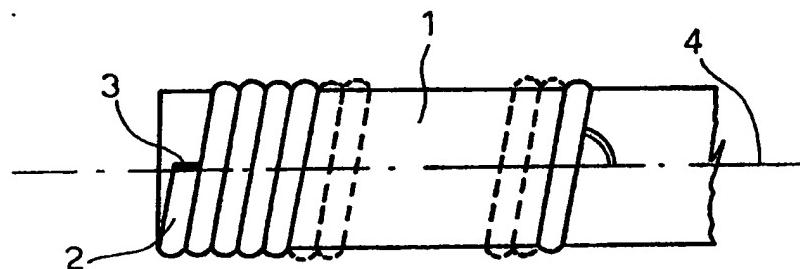


Fig. 2

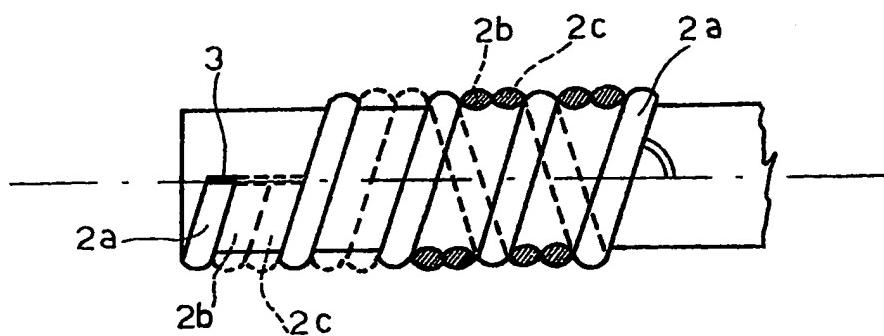


Fig. 3

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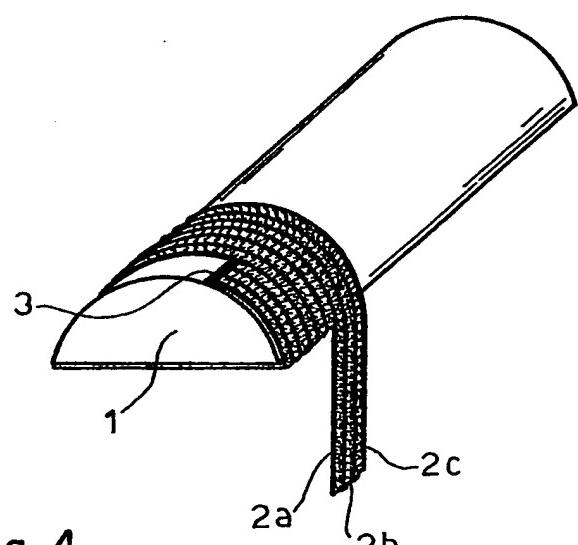


Fig. 4

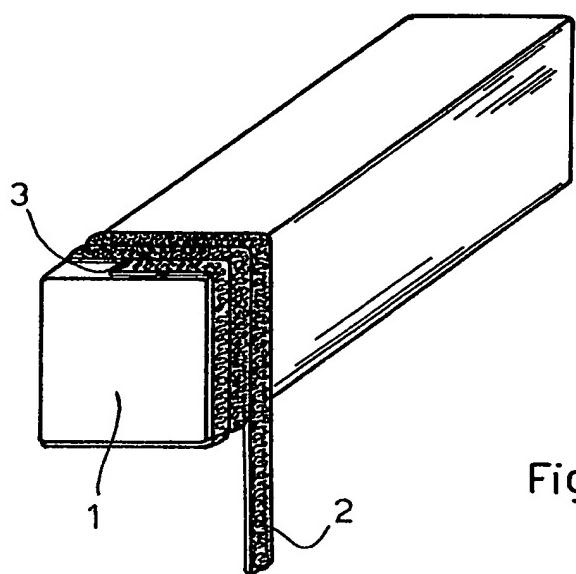


Fig. 5

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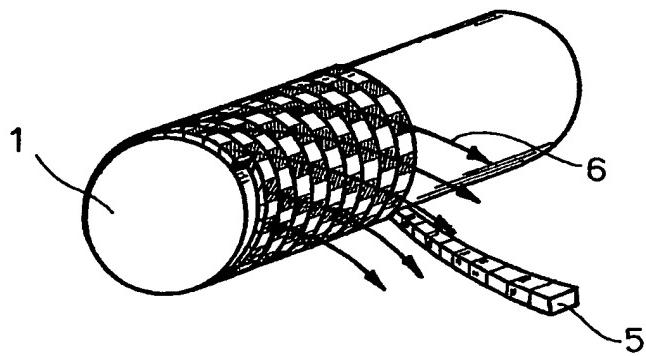


Fig. 6

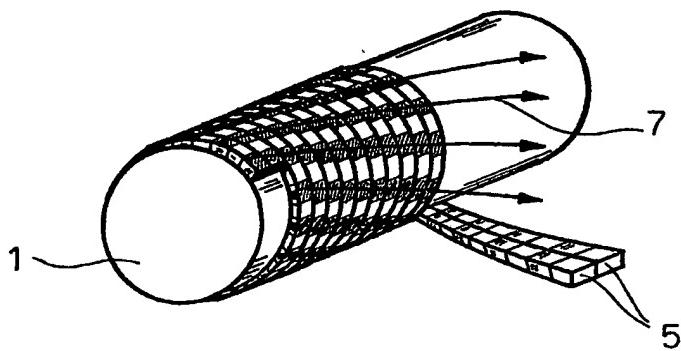


Fig. 7

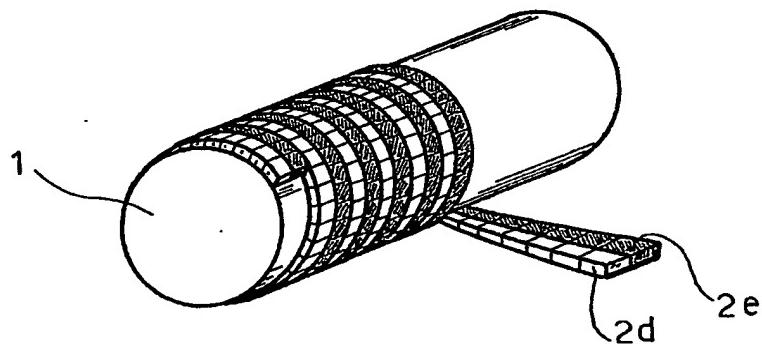


Fig. 8

**SPECIFICATION**

**Method for making necklaces, bracelets and the like, by chains wound upon a supporting core**

- 5 This invention concerns a method for making bracelets, necklaces, earrings, rings and the like (items of jewellery) and also concerns bracelets, necklaces and similar articles obtained according to  
10 the invention.
- Several types of bracelets, necklaces and the like are currently made in the jewellery sector, each type, however, must be individually designed and created by traditional systems which must, from time to  
15 time, be varied or adapted to the type or design of the necklace or bracelet to be made.
- Usual working systems are much too rigid, that is to say, not modifiable or not easily modifiable according to the various features or aesthetical  
20 appearance of the articles to be made. In other words, with traditional techniques, it is not possible to change the shape, type or aesthetical appearance of the object, except by completely modifying the method of operating.
- 25 An object of this invention is to provide a method for making necklaces, bracelets and other similar ornamental objects, by means of which it is possible to vary the shape, dimensions or the aesthetical design of the object itself, without substantially altering or modifying the production procedure.
- A further object of this invention is to provide a method as defined above, by which it is possible to make various ornamental objects such as necklaces, bracelets and similar articles, by using a limited  
35 number of basic components, such as chains made of precious metals, and supporting elements, designed to constitute an elongated internal core onto which the chain is wound: in this way it is possible to modify or vary the appearance, shape or  
40 dimensions of the necklace or suchlike, by simply varying the number and type of chains used, or by varying the shape or cross-section of the supporting element.
- The method for making necklaces, bracelets and  
45 the like, according to the invention, by means of wound chains, consists of preparing an elongate supporting or internal core made of precious metal, and at least one chain for the outer covering, made of precious metal; securing one end of the chain to  
50 the supporting element and forming a continuous covering by winding said chain around the said core in spiral fashion, keeping the turns of the chain close together, and securing the chain wound onto the supporting element, preventing it from unwinding.
- 55 According to another aspect of the invention, a necklace, bracelet or the like is provided, comprising an elongate supporting core, made of precious metal, and at least one chain consisting of elements made of precious metal linked together, said chain  
60 being spirally wound onto the core, said supporting core presenting at least one cross-sectional size comparatively greater than the lengthwise dimension of the chain elements, the chain being tightly wound around and secured to the aforesaid supporting core.
- 65

Some specific embodiments of necklaces or bracelets obtained according to this invention, are given hereunder with reference to the drawings, in which:

- 70 Fig. 1 is a perspective view of part of a necklace or bracelet, showing the method of invention using a single chain wound around a cylindrical core;  
Fig. 2 shows a chain wound according to one winding angle;
- 75 Fig. 3 is a similar view to that of fig. 2, but showing the simultaneous winding of three chains side by side;  
Fig. 4 shows a further embodiment, which makes use of an internal core with a semi-circular cross-section;
- 80 Fig. 5 shows a fourth embodiment in which the inner supporting core, onto which the chain is wound, presents a square cross-section;  
Figs. 6 and 7 show a fifth and respectively a sixth embodiment which make use of flat-link chains, to show a secondary winding effect of the chains;  
Fig. 8 is a further embodiment showing the simultaneous winding of two chains having differing features.
- 90 With reference to Figures 1 and 2, a description will now be given of the overall features of the method for preparing necklaces, bracelets and suchlike according to the invention. As shown, reference 1 indicates an element or inner supporting core  
95 around which is wound at least one link chain or other type of chain 2, keeping the turns of the chain 2 close to each other and wound tightly onto the aforesaid supporting core 1.  
The core or support 1, for example, with a circular cross-section, is either cut to the desired length or presents an indefinite length in order to make several subsequent articles.
- 100 Onto one end of the supporting core 1 is fixed, for example, welded at 3, the corresponding end of the covering chain 2; the chain 2 is then spirally wound, keeping the turns close together at an angle of inclination which may be changed with respect to the longitudinal axis of the core 1, according to the various requirements and depending upon various  
105 characteristics such as, for example, the width and the number of chains wound simultaneously around the core 1.
- The core consists of a profiled element, made of a first precious metal, the cross-section of which may be of any desired shape, and a first dimension of which is prevalently or substantially greater than the longitudinal dimension of the single links of the chain. The chain 2 for covering the inner core is also made from precious metal, either of the same  
110 type or different to that of the core 1.
- 115 The chain is wound in spirals onto the core 1, starting at one end and continuing until the aforesaid core is completely covered; the chain is then cut and welded or otherwise secured to the other end of the support 1 in order to prevent it from unwinding.
- 120 The characteristics of the supporting core, as mentioned previously, may be varied and adapted to the various requirements by varying, for example, the shape, dimensions, flexibility or degree of rigidity of the support itself, either adopting the same type of  
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- 130

chain or varying the type and/or number of chains to be wound onto the supporting core 1.

In this way, it is possible to vary the weight, shape and features of the necklace or bracelet thus

- 5 obtained; for example, in the case of cylindrical cores with a solid section, as shown in Figure 1, such core presents a certain degree of rigidity and can be bent and shaped into any desired shape whatsoever; or, the core 1 can be tubular or chain shaped, or may
- 10 have a greater degree of flexibility than the previous case, and can therefore assume any desired shape due to the flexibility of the core itself.
- 15 In particular, it is pointed out that the use of tubular cores make it possible to obtain necklaces
- 20 bracelets and suchlike, with considerable crosswise dimensions, of a limited weight due to the lesser amount of valuable material used and, therefore, at a lower cost. It was mentioned previously that the winding angle of the covering chain, that is to say,
- 25 the angle formed by the plane of each individual turn with the longitudinal axis 4 of the core 1, generally depends upon the dimensions and the number of chains wound simultaneously onto the same supporting core. This is represented schematically in the diagram of Figs. 2 and 3 where Fig. 2 shows the
- 30 winding of a single chain 2 with relatively small transversal dimensions, with respect to those of the core 1, and in which the turns form a winding angle of slightly less than 90°.
- 35 According to one of the possible variations, the winding angle of the coils by the covering chain can be varied, for example, by simultaneously winding two or more chains in pairs, as shown by 2a, 2b and 2c in Fig. 3 of the drawings. In particular, the diagram

- 35 in Fig. 3 stresses the different winding angle of the chain 2a with respect to that of a single chain.
- 40 A further way of varying the winding angle can consist of winding and securing the first turn of the chain or chains, according to a pre-established angle, and then winding the consecutive turns very closely together, keeping them at the same winding angle as the first. In order to prevent, either in this case or the previous one, the turns from becoming misaligned or partially unwound, for example, during the subsequent manufacturing operations necessary for bending or shaping the article, it is possible to secure the entire chain onto the inner supporting core, for example, by submitting the entire article to heat treatment in an oven heated to a
- 45 suitable temperature so that the metal of the chain is welded or is made to adhere to the metal of the supporting core. The chain thus forms a single body with the inner core. As mentioned previously, the core 1 may either be solid or hollow (as shown by
- 50 the continuous line or the dotted line in Fig. 1) and the cross-section of said core can be of any shape, for example, circular (Fig. 1), elliptic, semi-circular (Fig. 4), square (Fig. 5), rectangular, or of any other desired shape.
- 55 Moreover, the chains wound singly or simultaneously, can either be of different types or of the same type, thus achieving a great number of possibilities of variations in making necklaces, bracelets and the like, according to the claimed method, starting from

- 60 a relatively limited number of components. For

example, in the case of Fig. 3, three chains 2a, 2b, 2c of the same type have been used, however it is clear that one or two of the chains could be of a different coloured material or a different patterned material

- 70 thereby obtaining different decorative and aesthetical effects.

In this way, the possibilities of designing and making new types of necklaces or the like, are widened considerably.

- 75 The originality and versatility of the system are further demonstrated by the examples in Fig. 6, 7 and 8 of the accompanying drawings. In particular, Figures 6 and 7 show a secondary winding effect, due to the gradual shifting forward, in the winding direction of the consecutive links or elements of the chain.
- 80 In particular, the example in Fig. 6 shows a chain consisting of a set of flat-link elements 5 articulated together, being wound onto a cylindrical core 1. In

- 85 order to accentuate the secondary spiral effect, indicated by the arrows 6, the adjacent elements of the chain are differently depicted.

Here too, the secondary winding angle, that is to say, the angle formed by a tangent line in one point of a secondary turn, shown by the direction of the arrows 6, with the longitudinal axis of the core, is considerably smaller than the winding angle of the single turns of chain, being able to approach very low angles, equal to or less than a few tens of degrees.

This secondary angle, generally depends on the winding angle of the chain, the dimensions of the inner core, the dimensions of the links or elements 6 of the chain itself, and also on the number of chains wound at one time. This is shown by the following example of Fig. 7, where two flat-link chains are wound onto a cylindrical core 1, forming a secondary winding effect with a smaller angle than the previous one, as shown by the arrows 7 in the figure itself.

Lastly, Figure 8 shows a further composition and combination of the basic elements; in order to achieve different aesthetical and decorative effects. In said Figure, reference 1 also shows a winding core

- 110 for two flat-link chains 2d and 2e, spirally wound parallelly close to each other.

It can be seen, however, from said Figure, that the chain 2d, being for example made of gold, presents a different colour to the chain 2e made of silver, thus creating an aesthetical spiral effect due, not only to the winding of the chains, but also to the secondary spiral effect, depending on the different colours of the two chains.

- 115 It is clear, therefore, that the invention consists in a new method or system for making necklaces, bracelets, rings, earrings and the like, starting from few basic elements such as an inner supporting core and one or more chains spirally wound around the aforesaid core 1, said chains when differently combined, make it possible to obtain a wide variety of aesthetically differing articles, adaptable to various requirements.
- 120 CLAIMS
- 125 1. Method for making necklaces, bracelets and the like, by means of wound chains, which com-

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- prises performing or selecting an elongate element for supporting the chain, defining an inner core and at least one covering chain securing one end of the chain to the supporting element and forming a continuous covering by spirally winding the chain around the aforesaid core, keeping the turns of the chain close together, and securing the chain to the supporting element, preventing its unwinding.
- 5      2. Method as claimed in claim 1, in which the wound turns of the chain are subsequently secured to the supporting element by heat treatment.
- 10     3. Method as claimed in claim 1, in which two or more chains are arranged parallelly and wound simultaneously onto the same supporting element.
- 15     4. Method as claimed in claim 3, in which the chains present differing shapes, sizes, patterns and/or colours.
5. Necklace, bracelet and the like, comprising an inner supporting core and at least one covering chain consisting of elements linked together and spirally wound onto the core, said supporting core presenting at least one dimension of its cross-section comparatively greater than the longitudinal dimension of the elements of the chain, the latter being tightly wound and secured to the aforesaid supporting core.
- 20     6. Necklace, bracelet and the like as claimed in claim 5, in which said inner supporting element consists of a substantially rigid element.
- 25     7. Necklace, bracelet and the like as claimed in claim 5, in which said inner supporting element consists of a substantially flexible element.
- 30     8. Necklace, bracelet and the like as claimed in claim 5, in which two or more similar chains are wound parallelly and adjacent onto the inner supporting core.
- 35     9. Necklace, bracelet and the like as claimed in claim 5, in which two or more different chains are parallelly wound and are adjacent on the same inner supporting core.
- 40     10. Necklace, bracelet and the like as claimed in claim 5, in which said inner supporting core consists of a solid-section profiled element.
- 45     11. Necklace, bracelet and the like as claimed in claim 5, in which said inner supporting core consists of a hollow shaped element.
- 50     12. Necklace, bracelet and the like as claimed in claim 7, in which said inner supporting core consists of at least one chain.
- 55     13. Method for making necklaces, bracelets and the like, as hereinbefore described with reference to the Figures of the accompanying drawings.
- 60     14. Necklace, bracelet and the like, as hereinbefore described, with reference to the Figures of the accompanying drawings.
- 65     15. Method as claimed in claim 1, wherein the inner core and/or chain(s) are made of precious metal.
- 70     16. Necklace, bracelet and the like as claimed in claim 5 wherein the inner core and/or chain(s) are made of precious metal.

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